# 1st PULA NEURO-INTERDISCIPLINARY SCHOOL

# BRAIN, MIND AND PAIN: MULTIMODAL (BIO-PSYCHO-SOCIAL) APPROACH TO PAIN MANAGEMENT

# THE ART OF HEADACHE MANAGEMENT

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Migraine is one of the ten most disabling disorders worldwide, and despite recent developments in the management of migraine, it remains underdiagnosed and undertreated. The management of migraine includes diagnosis, preventive measures and treatment of migraine attacks.

Migraine diagnosis. Migraine is a chronic condition with recurrent attacks. Most (but not all) migraine attacks are associated with headaches. Migraine headaches usually are described as an intense, throbbing or pounding pain that involves one temple. (Sometimes the pain is located in the forehead, around the eye, or at the back of the head). The pain usually is unilateral (on one side of the head), although about a third of the time the pain is bilateral (on both sides of the head). The unilateral headaches typically change sides from one attack to the next. (In fact, unilateral headaches that always occur on the same side should alert the doctor to consider a secondary headache, for example, one caused by a brain tumor). A migraine headache usually is aggravated by daily activities such as walking upstairs. Nausea, vomiting, diarrhea, facial pallor, cold hands, cold feet, and sensitivity to light and sound commonly accompany migraine headaches. As a result of this sensitivity to light and sound, migraine sufferers usually prefer to lie in a quiet, dark room during an attack. A typical attack lasts between 4 and 72 hours. An estimated 20% of migraine headaches are associated with an aura. Usually, the aura precedes the headache, although occasionally it may occur simultaneously with the headache.

Migraine treatment. Treatment of migraine includes therapies that may or may not involve medications. Therapy that does not involve medications can provide symptomatic and preventative therapy. Using ice, biofeedback, and relaxation techniques may be helpful in stopping an attack once it has started. Sleep may be the best medicine if it is possible. Preventing migraine takes motivation for the patient to make some life changes. Patients are educated as to triggering factors that can be avoided. These triggers include: smoking, and avoiding certain foods especially those high in tyramine such as sharp cheeses or those containing sulphites (wines) or nitrates (nuts, pressed meats). Generally, leading a healthy life-style with good nutrition, an adequate intake of fluids, sufficient sleep and exercise may be useful.

*Medication for migraine.* Individuals with occasional mild migraine headaches that do not interfere with daily activities usually medicate themselves with over-the-counter (OTC or non-prescription) pain relievers (analgesics). Many OTC analgesics are available. OTC analgesics have been shown to be safe and effective for short-term relief of headache. It is important to use an sufficient dose of analgetic on NSAIDs when treating migraine (Aspirin 1000 mg or Ibuprofen 400 – 800 mg or Diclofenac 50 – 100 mg or Ketoprofen 100 mg or Naproxen 500-1000 mg). When abovementioned medications are contraindicated use Paracetamol 500 – 1000 mg.

Migraine-specific abortive medications usually are necessary for moderate to severe migraine headaches. The abortive medications for moderate or severe migraine headaches are different than OTC analgesics. Instead of relieving pain, they abort headaches by counteracting the cause of the headache, dilation of the temporal arteries. In fact, they cause narrowing of the arteries. Examples of migraine-specific abortive medications are the triptans and ergot preparations.

Traditionally, triptans were prescribed for moderate or severe migraines after OTC analgesics and other simple measures failed. Newer studies suggest that triptans can be used as the

first treatment for patients with migraines that are causing disability. (Significant disability is defined as more than 10 days of at least 50% disability during a three-month period.). Triptans should be used early after the migraine begins, before the onset of pain or when the pain is mild. Using a triptan early in an attack increases its effectiveness, reduces side effects, and decreases the chance of recurrence of another headache during the following 24 hours. Used early, triptans can be expected to abort more than 80% of migraine headaches within two hours. Ergots, like triptans, are medications that abort migraine headaches. These may be combined with caffeine and/or other pain relief medications in combination products. Examples of ergots include ergotamine preparations (Ergomar, Wigraine, and Cafergot) and dihydroergotamine preparations (Migranal, DHE-45). There is also a combined medication for specific treatment of migraine (Nomigren) which consists of 5 ingridients including ergotamine.

The presented algorithm of migraine diagnosis and treatment is based on European recommendations for migraine treatment and is designed to assist physicians in making appropriate choices in the management and treatment of migraine patients.